UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,804	08/04/2003	Michael C. Robinson	200207438-1	7237

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EXAMINER
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ART UNIT	PAPER NUMBER
2161	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/633,804	ROBINSON ET AL.
	Examiner	**Art Unit**	
	Paul Kim	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 February 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-9,11-17 and 21*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-9,11-17 and 21*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to the following communication: Amendment filed on 26

February 2007.

2.   Claims 1-9, 11-17 and 21 are pending and present for examination. Claims 1, 7, 15, and 21 are

independent.

Response to Amendment

3.   Claims 1, 7, 15, and 21 have been amended.

4.   Claim 10 has been cancelled.

5.   No claims has been added.

Continued Examination Under 37 CFR 1.114

6.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for continued

examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

submission filed on 26 February 2007 has been entered.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
> are such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

8.   **Claims 1-17 and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya

(U.S. Patent No. 6,950,864, hereinafter referred to as TSUCHIYA), filed on 27 July 2000, and issued on

27 September 2005, in view of Essential SNMP, by Douglas Mauro et al, and published on 15 October

2001, and in further view of Official Notice.

TSUCHIYA differs from the claimed invention in that it fails to expressly disclose a method

wherein creating an object uses a SET command.

MAURO discloses a NMS which processes a SET command to change the value of a managed

object or to create a new row in a table.

9.   **As per independent claims 1, 15 and 21**, TSUCHIYA, in combination with MAURO and

Official Notice, discloses:

A method for accessing a database of interest {See MAURO, Section 1.4, wherein this reads over "[t]he Management Information Base (MIB) can be thought of as a database of managed objects that the agent tracks"}, the method comprising:

a management application {See MAURO, Chapter 5, wherein this reads over "Network-Management Software"} creating a first object for indicating a unique identifier identifying a data item {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"} wherein said creating said first object uses a first SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"};

an agent {See TSUCHIYA, col. 1, lines 13-18, wherein this reads over "a management object process unit incorporated in the managed device as an agent"} storing said unique identifier in a restricted intermediate database {See TSUCHIYA, col. 2, lines 13-14, wherein this reads over "a memory section for storing the management object collected from the managed device"} which is distinct from the database of interest <u>and to which access is unavailable with the management application</u> {See TSUCHIYA, col.5, lines 44-55, wherein this reads over "the table managing section 22 refers to the management table 20 to determine the type classified by the classification data for the management object identified based on the management object identifier taken out by the command analyzing section"};

said management application creating a second object {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"} for indicating a data type for said data item {See TSUCHIYA, Fig. 5, Element 20d}, said creating said second object including use of a second SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"};

said agent {See TSUCHIYA, col. 1, lines 13-18, wherein this reads over "a management object process unit incorporated in the managed device as an agent"} storing said data type in said restricted intermediate database {See TSUCHIYA, col. 2, lines 13-14, wherein this reads over "a memory section for storing the management object collected from the managed device"};

said management application creating a third object {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"} for indicating an action to be performed on said data item with respect to the database of interest {See MAURO, Section 2.6.4, wherein this reads over "[t]he s tells snmpset that we want to set the value of sysLocation to a string"}, said creating said third object including use of a third SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"};

said agent issuing an action command to perform said action {See TSUCHIYA, col. 1, lines 26-29, wherein this reads over "[t]he agent . . . transmits a response for the request in the form of the SNMP command to the manager"}, wherein said agent uses said stored unique identifier, said stored data type, and said action {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"};

said agent receiving a response to said action command from the database of interest {See MAURO, Section 1.4, wherein this reads over "RDBMS MIB"; and Section 2.6.4, wherein this reads over "run a final smpget, which tells us that the set actually took effect"} and sending said response to said management application {See MAURO, Section 2.6.4, Figure 2-8, wherein this reads over "the agent performs the set and returns a noError response to the NMS"}.

The Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art that a managed device or object, as disclosed by both TSUCHIYA and MAURO, would include a database. That is, while TSUCHIYA and MARUO may not expressly disclose that the managed device or object is a database, it would have been obvious and widely-known to those of ordinary skill in the art that a database would qualify as a managed device or object.

Additionally, While TSUCHIYA teaches the use of an agent and certain SNMP commands directed toward a management object, MAURO teaches the specific use of "set" and "get" Operations. Therefore, since the prior art MAURO further discloses the details of issuing an SNMP command and the MIB structure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by TSUCHIYA by combining it with the invention disclosed by MAURO. The results of this combination would lead to the method for a management application (i.e.

Network Management Software) accessing a database by means of an agent which stores a unique identifier and data type in a restricted intermediate database.

Additionally, with respect to the amendment which recites a limitation that has the agent "receiving said unique identifier (also said data type and said action) from said management application" wherein the received data is stored in a restricted intermediate database "distinct from the database of interest," TSUCHIYA discloses a network management system wherein "the MIB processing section collects a management object . . . from the managed device 13 and processes the management object into an MIB format" {See TSUCHIYA, C4:L45-57}. Furthermore, "[t]he object managing section 19 manages the management object collected" and stores the received data in a management table which is "composed of the management object identifier, the management object collection time, the collected management object, and classification data" {See TSUCHIYA, C5:L3-5 and 61-65}. Therefore, one of ordinary skill in the art at the time the invention was made would correlate the aforementioned prior art with the present invention such that the data would be stored in a restricted intermediate database (i.e. the management table) distinct from the database of interest (i.e. the managed database device).

One of ordinary skill in the art would have been motivated to do this modification so that SNMP may be used in accessing restricted management objects.

10.   **As per dependent claims 2 and 12**, TSUCHIYA, in combination with MAURO and Official Notice, discloses:

> The method recited in claim 1, wherein said response indicating success is said data item {See MAURO, Section 2.6.4, wherein this reads over "the snmpset command succeeds and reports the new value of sysLocation"}.

11.   **As per dependent claims 3 and 13**, TSUCHIYA, in combination with MAURO, discloses:

> The method recited in claim 1, wherein said response indicating failure is an error message {See MAURO, Section 2.6.4, wherein this reads over "[the agent] performs other checks and, if any of them fail, returns a get-response with the appropriate error code"}.

12.   **As per dependent claims 4, 8, and 16,** TSUCHIYA, in combination with MAURO and Official Notice, discloses:

The method recited in claim 1, wherein said action is a returning to said management application of said data item from the database of interest, and said action command is a GET command {See MAURO, Section 2.6.4, wherein this reads over "run a final snmpget, which tells us that the set actually took effect"}.

13.   **As per dependent claims 5, 9, and 17,** TSUCHIYA, in combination with MAURO and

Official Notice, discloses:

The method recited in claim 1, wherein said action is a storing of said data item in the database of interest {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"};

said action command is a fourth SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"}; and

further comprising: said management application creating a fourth object for indicating an actual value of said data item to be stored in the database of interest {See MAURO, Section 2.6.4, wherein this reads over "s tells snmpset that we want to set the value of sysLocation to a string; and 'Atlanta, GA' is the new value itself"}.

14.   **As per dependent claims 6 and 14,** TSUCHIYA, in combination with MAURO and

Official Notice, discloses:

The method recited in claim 1, wherein the database of interest is a restricted database {See MAURO, Section 1.4, wherein this reads on "a proprietary MIB"; and Section 2.6.4, wherein this reads over "[o]bjects that are defined In the MIB as read-write or write-only can be altered or created using this command"}.

15.   **As per independent claim 7,** TSUCHIYA, in combination with MAURO and Official Notice,

discloses:

An apparatus for accessing a database of interest, the apparatus comprising:

a first network device <u>providing a management application</u> {See MAURO, Section 2.6.4, wherein this reads over "NMS"};

a second network device {See MAURO, Section 1.4, wherein this reads over "RDBMS MIB"} operatively coupled to said first network device; and

an agent <u>configured</u> {See TSUCHIYA, col. 1, lines 13-18, wherein this reads over "a management object process unit incorporated in the managed device as an agent"} to monitor said second network device {See MAURO, Section 1.4, wherein this reads over "RDBMS MIB"};

wherein <u>said management application of</u> said first network device is <u>configured to:</u>

create a first object for indicating a unique identifier for a data item {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over

"the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"} using a first SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"},

create a second object {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"} for indicating a data type for said data item {See TSUCHIYA, Fig. 5, Element 20d} using a second SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"},

create a third object{See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"; "command type specifies one of commands such as GET . . . SET"; and "management object identifier specifies a device address and a management object referred to by the command"}, using a third SET command {See MAURO, Section 2.6.4, wherein this reads over "[t]he set command is used to change the value of a managed object or to create a new row in a table"}, for indicating an action to be performed on said data item with respect to the database of interest{See MAURO, Section 2.6.4, wherein this reads over "[t]he s tells snmpset that we want to set the value of sysLocation to a string"}, and

receive a response to an action command to perform said action {See MAURO, Section 2.6.4, wherein this reads over "[the agent] performs other checks and, if any of them fail, returns a get-response with the appropriate error code"}; and

wherein said agent is further configured to:

receive said unique identifier from said first network device and store said unique identifier in a restricted intermediate database {See TSUCHIYA, col. 2, lines 13-14, wherein this reads over "a memory section for storing the management object collected from the managed device"} which is distinct from the database of interest and to which access is unavailable with the management object {See TSUCHIYA, col.5, lines 44-55, wherein this reads over "the table managing section 22 refers to the management table 20 to determine the type classified by the classification data for the management object identified based on the management object identifier taken out by the command analyzing section"},

receive said data type from said first network device and store said data type in said restricted intermediate database {See TSUCHIYA, col. 2, lines 13-14, wherein this reads over "a memory section for storing the management object collected from the managed device"},

receive said action from said first network device and issue said action {See TSUCHIYA, col. 1, lines 26-29, wherein this reads over "[t]he agent . . . transmits a response for the request in the form of the SNMP command to the manager"} command using said stored unique identifier, said stored data type, and

said action {See TSUCHIYA, Fig. 5, Element 20a; and col. 4, lines 29-44, wherein this reads over "the field of the SNMP command is constituted so as to include a command type, a request index, and a management object identifier"},

receive said response from the database of interest {See MAURO, Section 1.4, wherein this reads over "RDBMS MIB"; and Section 2.6.4, wherein this reads over "run a final smpget, which tells us that the set actually took effect"}, and

send said response to said first network device {See MAURO, Section 2.6.4, Figure 2-8, wherein this reads over "the agent performs the set and returns a noError response to the NMS"}.

The Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art that a managed device or object, as disclosed by both TSUCHIYA and MAURO, would include a database. That is, while TSUCHIYA and MARUO may not expressly disclose that the managed device or object is a database, it would have been obvious and widely-known to those of ordinary skill in the art that a database would qualify as a managed device or object.

While TSUCHIYA teaches the use of an agent and certain SNMP commands directed toward a management object, MAURO teaches the specific use of "set" and "get" Operations. Therefore, since the prior art MAURO further discloses the details of issuing an SNMP command and the MIB structure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by TSUCHIYA by combining it with the invention disclosed by MAURO. The results of this combination would lead to the method for a management application (i.e. Network Management Software) accessing a database by means of an agent which stores a unique identifier and data type in a restricted intermediate database.

Additionally, with respect to the amendment which recites a limitation that has the agent "receiving said unique identifier (also said data type and said action) from said management application" wherein the received data is stored in a restricted intermediate database "distinct from the database of interest," TSUCHIYA discloses a network management system wherein "the MIB processing section collects a management object . . . from the managed device 13 and processes the management object into an MIB format" {See TSUCHIYA, C4:L45-57}. Furthermore, "[t]he object managing section 19 manages the management object collected" and stores the received data in a management table which is

"composed of the management object identifier, the management object collection time, the collected

management object, and classification data" {See TSUCHIYA, C5:L3-5 and 61-65}. Therefore, one of

ordinary skill in the art at the time the invention was made would correlate the aforementioned prior art

with the present invention such that the data would be stored in a restricted intermediate database (i.e.

the management table) distinct from the database of interest (i.e. the managed device).

One of ordinary skill in the art would have been motivated to do this modification so that

SNMP may be used in accessing restricted management objects.

16.   **As per dependent claim 10**, TSUCHIYA, in combination with MAURO and Official Notice,

discloses:

> The apparatus recited in claim 7, wherein said first network device is a network
> management station {See MAURO, Section 2.6.4, wherein this reads over "NMS"}.

17.   **As per dependent claim 11**, TSUCHIYA, in combination with MAURO and Official

Notice, discloses:

> The apparatus recited in claim 7, wherein said second network device is a
> monitored device {See MAURO, Section 1.4, wherein this reads over "RDBMS MIB"}.

Response to Arguments

18.   Applicant's arguments with respect to claims 1, 7, 15, and 21 have been considered but are moot

in view of the new ground(s) of rejection.

Conclusion

19.   Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be

reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim
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SAM RIMELL
PRIMARY EXAMINER